

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/673,905	10/23/2000	Klaus Gradischnig	SIEM0015U/US	7207
31518	7590 08/22/2005		EXAMINER	
NEIFELD IP LAW, PC 4813-B EISENHOWER AVENUE			NGUYEN, QUANG N	
	IA, VA 22304		ART UNIT	PAPER NUMBER
	·	•	2141	
			DATE MAILED: 08/22/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

<u></u>						
· · · · · · · · · · · · · · · · · · ·	Application No.	Applicant(s)				
Office Action Summers	09/673,905	GRADISCHNIG, KLAUS				
Office Action Summary	Examiner	Art Unit				
The MAILING DATE of this communication and	Quang N. Nguyen	2141				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status						
1) Responsive to communication(s) filed on 21 J	<u>uly 2005</u> .					
2a)⊠ This action is FINAL . 2b)□ Thi	s action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims						
• 4)⊠ Claim(s) <u>1-18</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-18</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>23 <i>October 2000</i></u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action. 12)☐ The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.						
14)⊠ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
a) ⊠ The translation of the foreign language provisional application has been received. 15)□ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.						
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal I	/ (PTO-413) Paper No(s) Patent Application (PTO-152)				

Application/Control Number: 09/673,905 Page 2

Art Unit: 2141

Detailed Action

This Office Action is in response to the Amendment filed on 07/21/2005. Claims
 1-7 and 11-18 have been amended. Claims 1-18 remain for examination.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-3, 5-8, 10-12, 14-15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferguson (US 5,521,902), in view of Christiansen et al. (US 6,075,855), hereinafter referred as Christiansen.
- 4. As to claims 1 and 11, Ferguson teaches a signalling node for processing signalling messages, comprising:

links via which the signalling node is connected to other signaling nodes (signaling point 20 with PC=8 connects to signaling point 20 with PC=9 via links 18A, 18B and 18C as illustrated in Fig. 2) (Ferguson, C4: L13-21);

at least one signalling system (signaling point 20 with PC=8) that sends signalling messages to other signalling nodes or, respectively, receives signalling messages from said other signalling nodes via said links (signalling point 20 with PC=8 sends/receives signalling messages to/from signalling point 20 with PC=9 via links 18A, 18B and 18C as in Fig. 2) (Ferguson, C4: L13-21);

characterized by said signaling system respectively allocates a signalling network identity to a link (for example, link 18A is uniquely identified or allocated by the triplet "8,9,1", and link 18B as "9,8,2", etc.) (Ferguson, Fig. 2 and C4: L22-38).

However, Ferguson does not explicitly teach at least one link that is not connected to other signalling nodes but formed as a loop, what is referred as a loop link, whereby different signaling network identities are allocated to the loop link at an output and input side by the signaling system.

In a related art, Christiansen teaches a system and method of accessing a Service Control Point (SCP) in an ISUP network, wherein at least one link that is not connected to other signalling nodes but formed as a loop, what is referred as a loop link (a loop-back trunk 6, as illustrated in Fig. 1, has an outbound side and an inbound side with respect to MSC 4, that is not connected to other signalling nodes but formed a loop), whereby different signaling network identities are allocated to the loop link at an output and input side by the signaling system (to MSC 4, loop-back trunk 6 appears as two independent trunks, each having a unique identification at the switch, a first signalling point code SPC and a second SPC are associated with the outbound and inbound voice trunk of loop-back trunk 6 respectively) (Christiansen, C3: L48-65).

Page 4

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teachings of Ferguson and Christiansen to include at least one link that is not connected to other signalling nodes but formed as a loop, what is referred as a loop link, whereby different signaling network identities are allocated to the loop link at an output and input side by the signaling system since such methods were conventionally employed in the art to provide a method in an ISUP network that will allow a connection to an intermediate destination followed by a connection to a final destination without complete call tear down upon release of the intermediate circuit (Christiansen, C2: L24-31).

- 5. As to claim 2, Ferguson-Christiansen teaches the signalling node of claim 1, wherein said signalling system, with assistance of said loop link communicates signalling messages between two signaling systems contained in the signaling point (Ferguson, C2: L44-45 and Christiansen, C3: L34-41).
- 6. As to claim 3, Ferguson-Christiansen teaches the signalling node of claim 1, wherein said signalling system generates internal load for test purposes (i.e., signalling link test messages are generated for test purposes) with assistance of said loop link (Ferguson, C5: L4-15).

Application/Control Number: 09/673,905 Page 5

Art Unit: 2141

7. As to claim 5, Ferguson-Christiansen teaches the signalling node of claim 1,

wherein said signalling system is a signalling system according to No. 7 (i.e., SS7/ISUP

network of Fig. 1) and allocates a same network identifier to said loop link at the output

and input side (preferably, both ends of loop-back trunk 6 have the same circuit

identification code CIC) (Christiansen, C3: L55-57).

8. Claims 6-8 and 10 are corresponding method claims of signalling node claims 1-

3 and 5; therefore, they are rejected under the same rationale.

9. As to claim 12, Ferguson-Christiansen teaches the signaling node of claim 1,

with the addition of at least one routing table configured with at least one of said first

unique network identity and said second unique network identity (the local switch

reserves an outgoing voice trunk to the intermediate exchange based on a routing table

entry associated with the dialed number) (Christiansen, C4: L7-21).

10. Claims 14-15 and 17 are corresponding signalling node claims of claims 2-3 and

5; therefore, they are rejected under the same rationale.

11. Claims 4, 9, 16 and 18 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Ferguson (US 5,521,902).

12. As to claims 4, 9 and 16, Ferguson teaches the invention of claims 1, 6 and 12, but does not explicitly teach said signalling system realizes an interworking communication with other networks with assistance of a said loop link.

However, as well known in the art that in SS7 networks, Service Switching Points "SSPs" 11 and Service Transfer Parts "STPs" 14 were conventionally employed and allocated in different networks.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teaching of Ferguson to utilize the assistance of a loop link at the SSPs and STPs in different networks to achieve an interworking communication with other networks because such Signal Transfer Points "STPs" (which are multi-port, high-speed packet switches that are programmed to respond to the routing information and route a packet to its destination) were conventionally employed in the art to interconnect between networks via a SS7 data link.

13. As to claim 18, Ferguson teaches the signalling node of claim 1, further comprising at least a second signaling system within said signaling node (as well known in the art that each of the network nodes, i.e., a signaling node, may include control units and storage units, wherein each control unit may include: microprocessors, microcontrollers, processor cards, computer systems and other control or computing devices to provide various processing and storage capabilities).

Application/Control Number: 09/673,905

Art Unit: 2141

Claim Rejections - 35 USC § 102

Page 7

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 15. Claim 13 is rejected under 35 U.S.C. 102(e) as being anticipated by Bressler (US 6,584,190).
- 16. As to claim 13, Bressler teaches a telephony communications system comprising:

allocating unique point codes to each of a plurality of signalling networks interconnecting a plurality of signalling nodes (each network node or signalling point, SSP 20, STP 22 or STP 24 of Fig. 2 is assigned a unique point code); and

routing a signal from a first network of said plurality of signalling networks to a second network of said plurality of signalling networks using said unique point codes (numeric point codes are carried in control signalling messages exchanged between

Art Unit: 2141

network nodes to identify the source and destination of each message and based on the point codes, an STP 22 accesses a routing table to select the appropriate signalling path for routing each message) (Bressler, C5: L45-62).

Response to Arguments

- 17. In the remarks, Applicant argued in substance that
 - (A) Prior Art does not disclose or suggest a "loop link" as recited in claim 1.

As to point (A), Christiansen teaches a system and method of accessing a Service Control Point (SCP) in an ISUP network, wherein at least one link that is not connected to other signalling nodes but formed as a loop, what is referred as a loop link (a loop-back trunk 6, as illustrated in Fig. 1, has an outbound side and an inbound side with respect to MSC 4, that is not connected to other signalling nodes but formed a loop), whereby different signaling network identities are allocated to the loop link at an output and input side by the signaling system (to MSC 4, loop-back trunk 6 appears as two independent trunks, each having a unique identification at the switch, a first signalling point code SPC and a second SPC are associated with the outbound and inbound voice trunk of loop-back trunk 6 respectively) (Christiansen, C3: L48-65).

Application/Control Number: 09/673,905 Page 9

Art Unit: 2141

18. Applicant's arguments as well as request for reconsideration filed on 07/21/2005

have been fully considered but they are not deemed to be persuasive.

19. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Application/Control Number: 09/673,905

Art Unit: 2141

20. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Quang N. Nguyen whose telephone number is (571)

272-3886.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

SPE, Rupal Dharia, can be reached at (571) 272-3880. The fax phone number for the

organization is (703) 872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

RUPAL DHARIA

Page 10